

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT IS LOCATED AT THE INTERSECTION OF MD 704 & SHERIFF ROAD IN PRINCE GEORGES COUNTY MARYLAND AND INVOLVES ROADWAY IMPROVEMENTS AND THE RECONSTRUCTION OF LOOP DETECTORS AND REALIGNMENT OF EXISTING SIGNAL HEADS FOR THE EXISTING SIGNAL THAT ARE EFFECTED BY THESE IMPROVEMENTS. MD 704 IS ASSUMED TO RUN IN A NORTH SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE PROPOSED TRAFFIC SIGNAL WILL OPERATE IN A NEMA SIX (6) PHASE, FULLY TRAFFIC ACTUATED MODE. THE MD 704 APPROACHES WILL OPERATE CONCURRENTLY WITH THE LEFT TURNS OPERATING IN AN EXCLUSIVE/PERMISSIVE PHASE. THE SHERIFF ROAD APPROACHES WILL OPERATE IN A SPLIT PHASE OPERATION.

THE EXISTING TRAFFIC CONTROLLER, SIGNAL POLES WILL REMAIN. TWO EXISTING SIGNAL HEADS WILL BE RELOCATED ALONG THEIR SPAN WIRES TO ALIGN WITH THE NEW TRAVEL LANES. A NEW R3-6 SIGN WILL BE INSTALLED. NEW LOOP WIRES AND PROBES WILL BE INSTALLED DUE TO GEOMETRIC IMPROVEMENTS.

III. SPECIAL NOTES

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM GEOMETRICS PRIOR TO PLACING SIGNAL EQUIPMENT.
- THE SIGNAL SHOP WILL BE NOTIFIED TO PERFORM INTERNAL WIRING OF THE CABINET AT MD 704 & SHERIFF ROAD ALL CABLE SHALL BE IDENTIFIED AND BROUGHT INTO THE CONTROLLER BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY MR. EDWARD RODENHIZER, SHA SIGNAL SHOP AT (410) 787-7650 SEVENTY-TWO (72) HOURS IN ADVANCE OF THIS WORK.

CONSTRUCTION DETAILS

- (A) INSTALL 6'X30' LOOP DETECTOR IN 1/4 INCH FLEXIBLE TUBING (3-6-3 TURNS).
- (B) INSTALL MICROLOOP PROBE SET 1000' LEAD-IN.
- (C) ABANDON EXISTING LOOP DETECTORS
- (D) INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT AND FITTING (DETECTOR WIRE SLEEVE).
- (E) INSTALL 24" WHITE PREFORMED PAVEMENT MARKING TAPE FOR STOP LINE.
- (F) USE EXISTING CONDUIT.
- (G) USE EXISTING HANDHOLE AND ADJUST TO GRADE AS NECESSARY.
- (H) SIGNAL HEAD TO BE RELOCATED ON EXISTING SPAN WIRE AS SHOWN.
- (I) INSTALL NEW PAVEMENT MARKING ARROWS.
- (J) INSTALL NEW PAVEMENT MARKING LETTERS.
- (K) INSTALL 12" WHITE PREFORMED PAVEMENT MARKING TAPE FOR CROSS WALK.
- (L) REMOVE EXISTING PAVEMENT MARKING.
- (M) INSTALL HANDHOLE.
- (N) INSTALL 2 INCH POLYVINYL CHLORIDE ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED.
- (O) INSTALL 2 INCH POLYVINYL CHLORIDE ELECTRICAL CONDUIT SCHEDULE 80 - BORED.
- (P) PAVEMENT MARKING BY OTHERS
- (Q) EXISTING PAVEMENT MARKING TO REMAIN
- (R) 6' x 30' LOOP DETECTOR BY OTHERS

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR:

| ITEM NO. | QUANTITY | DESCRIPTION |
|----------|-----------|--|
| 900001 | 7.50 S.F. | FURNISH SHEET ALUMINUM SIGNS TO CONSIST OF: |
| | 1 EA | R3-6 (30"x36") LEFT TURN THRU ONLY LANE SIGN SPAN WIRE MOUNT |

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR:

| ITEM NO. | QUANTITY | DESCRIPTION |
|----------|----------|--|
| 585443 | 625 LF | FURNISH AND INSTALL 12" WHITE PAVM'T MARKING TAPE FOR CROSS WALK |
| 585445 | 90 LF | FURNISH AND INSTALL 24" WHITE PAVM'T MARKING TAPE FOR STOP LINES |
| 585446 | 4 EA | FURNISH AND INSTALL PAVEMENT MARKING LETTERS |
| 585448 | 2 EA | FURNISH AND INSTALL PAVEMENT MARKING ARROWS |
| 862102 | 750 LF | INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR) |
| 805160 | 70 LF | FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT (DETECTOR WIRE SLEEVE) |
| 860265 | 2 EA. | RELOCATE EX. SIGNAL HEADS |
| 862101 | 2150 LF | FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING |
| 861104 | 1600 LF | FURNISH AND INSTALL ELECTRICAL CABLE 2 CONDUCTOR (ALUMINUM SHIELDED) |
| 813015 | 7.5 SF | INSTALL OVERHEAD SIGNS |
| 800000 | 5 EA. | FURNISH AND INSTALL PROBES - 1000' LEAD-IN. |
| 811001 | 3 EA. | FURNISH AND INSTALL HANDHOLE |
| 805125 | 65 LF | FURNISH AND INSTALL 2" SCHEDULE 80 PVC CONDUIT TRENCHED |
| 805105 | 165 LF | FURNISH AND INSTALL 2" SCHEDULE 80 PVC CONDUIT BORED |
| 800001 | 1 EA. | ADJUST EXISTING HANDHOLE TO GRADE AS NECESSARY |

THE FOLLOWING CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
(410) 787-7630

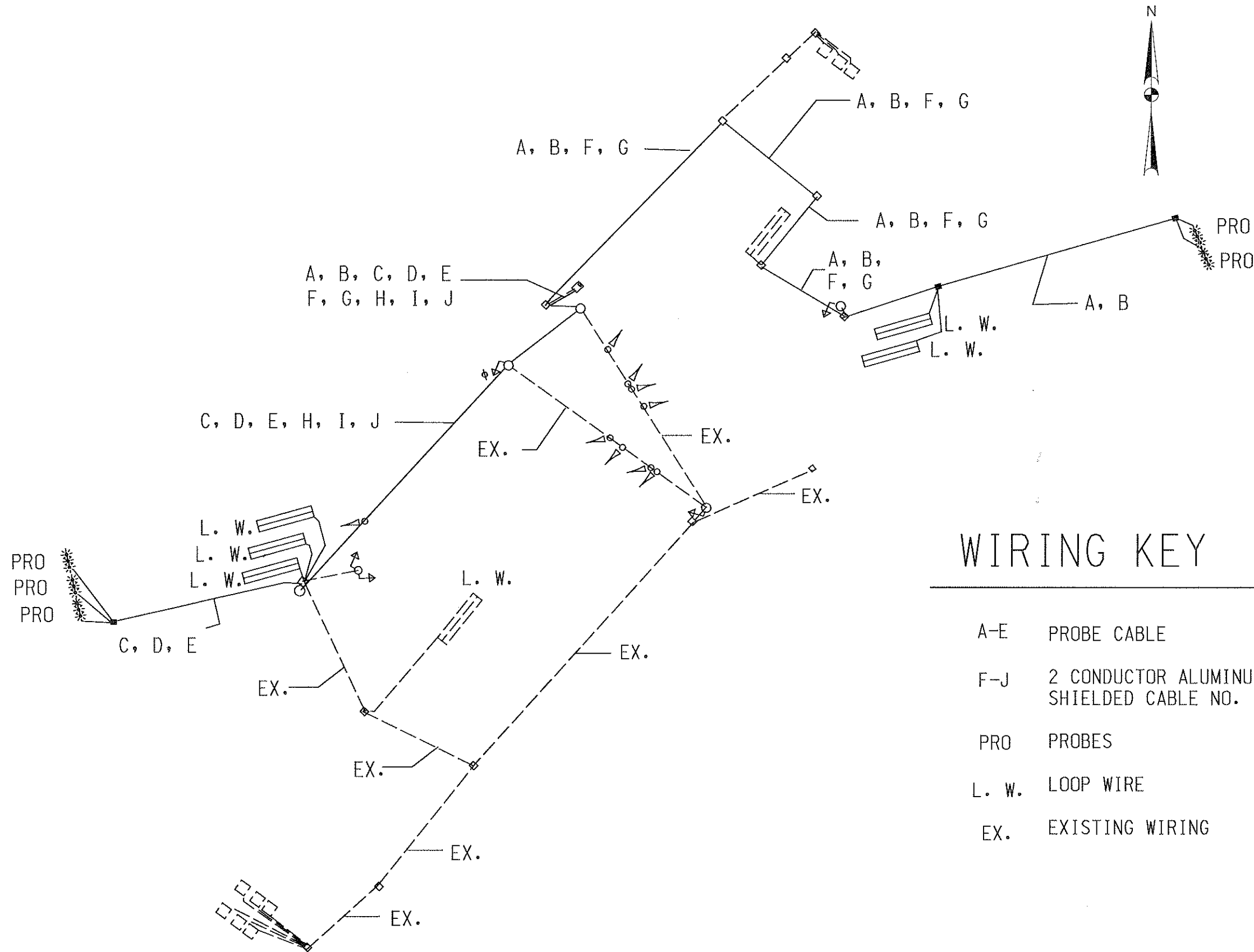
MR. MAJIB SHAKIB
ASST. DISTRICT ENGINEER - TRAFFIC
(301) 513-7358

MR. AUGUSTINE REBISH
ACTING ENGINEER - UTILITY
(301) 513-7350

MR. CHARLES WATKINS
DISTRICT ENGINEER
(301) 513-7311

MR. RANDY BROWN
ASST. DISTRICT ENGINEER - MAINTENANCE
(301) 513-7304

WIRING DIAGRAM



WIRING KEY

- A-E PROBE CABLE
- F-J 2 CONDUCTOR ALUMINUM SHIELDED CABLE NO. 14 AWG
- PRO PROBES
- L. W. LOOP WIRE
- EX. EXISTING WIRING

PHASE CHART

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|--------------------|--|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| PHASE 1 & 5 | R | R | R | R | R | R | R | R | R | DW | DW | DW | DW | DW | DW |
| PHASE 1 & 5 CHANGE | TO PHASE 1 & 6 OR TO 2 & 5 OR TO 2 & 6 | | | | | | | | | | | | | | |
| PHASE 1 & 6 | G | G | R | R | R | R | R | R | R | DW | DW | DW | DW | DW | DW |
| PHASE 1 & 6 CHANGE | G | G | R | R | R | R | R | R | R | DW | DW | DW | DW | DW | DW |
| PHASE 2 & 5 | R | R | G | G | R | R | R | R | R | DW | DW | DW | DW | DW | DW |
| PHASE 2 & 5 CHANGE | R | R | G | G | R | R | R | R | R | DW | DW | DW | DW | DW | DW |
| PHASE 2 & 6 | G | G | G | G | R | R | R | R | R | WK | WK | WK | WK | DW | DW |
| PHASE 2 & 6 CHANGE | Y | Y | Y | Y | R | R | R | R | R | FL/DW | FL/DW | FL/DW | FL/DW | DW | DW |
| PHASE 3 | R | R | R | R | R | R | R | G | G | DW | DW | DW | DW | DW | DW |
| PHASE 3 CHANGE | R | R | R | R | R | R | R | Y | Y | DW | DW | DW | DW | DW | DW |
| PHASE 4 | R | R | R | R | G | G | G | R | R | DW | DW | DW | DW | DW | DW |
| PHASE 4 CHANGE | G | G | G | G | G | Y | Y | R | R | DW | DW | DW | DW | DW | DW |
| PHASE 4 ALT. | R | R | R | R | G | G | G | R | R | DW | DW | DW | DW | WK | WK |
| PED CLEAR | R | R | R | R | G | G | G | R | R | DW | DW | DW | DW | FL/DW | FL/DW |
| PHASE 4 ALT CHANGE | R | R | R | R | Y | Y | Y | R | R | DW | DW | DW | DW | DW | DW |
| FLASHING OPERATION | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | FL/R | DARK | DARK | DARK | DARK | DARK | DARK |



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|--|--|-----------|--|--|-----------------------------------|--|
| REVISIONS | APPROVALS | REVISIONS | MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION MD. 704 & SHERIFF ROAD GENERAL INFORMATION LOG MILE: 16070401.51 | | | |
| | CHIEF, DESIGN SECTION | | | | | |
| | ASST. DISTRICT ENGINEER, TRAFFIC | | | | | |
| | CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION | | | | | |
| | DIRECTOR, TRAFFIC & SAFETY | | | | | |
| DRAWN BY: S.R.BARANOWSKI CHK. BY: R.R.ZACHERL SCALE: 1" = 20' DATE: 3/16/88 | | | F.A.P. NO. M5025 (2) S.H.A. NO. P-408-001-385 COUNTY PRINCE GEORGES | | TS NO. TS-96B SHEET NO. 2 OF 2 | |